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SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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EXAMINER

25M1/0724

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801 GRAND AVENUE
SUITE 3200
DES MOINES IA 50309

ARTUNITY PAPER NUMBER

2505

DATE MAILED: 07/24/97

 This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

☒ This application has been examined ☐ Responsive to communication filed on _____ ☐ This action is made final.

 A shortened statutory period for response to this action is set to expire 3 month(s), _____ days from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited by Examiner, PTO-892. | 2. <input checked="" type="checkbox"/> Notice of Draftsman's Patent Drawing Review, PTO-948. |
| 3. <input checked="" type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449. | 4. <input type="checkbox"/> Notice of Informal Patent Application, PTO-152. |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474. | 6. <input type="checkbox"/> _____ |

Part II SUMMARY OF ACTION

1. ☒ Claims 1-13 are pending in the application.
Of the above, claims _____ are withdrawn from consideration.
2. ☐ Claims _____ have been cancelled.
3. ☐ Claims _____ are allowed.
4. ☒ Claims 1-13 are rejected.
5. ☐ Claims _____ are objected to.
6. ☐ Claims _____ are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.
8. ☐ Formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on _____. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice of Draftsman's Patent Drawing Review, PTO-948).
10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on _____, has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed _____, has been ☐ approved; ☐ disapproved (see explanation).
12. ☐ Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. _____; filed on _____.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

EXAMINER'S ACTION

Art Unit: 2505

INFORMALITIES

The disclosure is objected to because of the following informalities:

Throughout the specification, abstract and claims; "monochromator" should be--
monochromator--

Appropriate correction is required.

103 REJECTION

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6,9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gerrish in view of Rosenthal, Goetz and Stearns et al.

Gerrish disclose everything except is vague as to the following items:

- A) monochromator having no moving parts
- B) a fiber optic cable connected to the monochromator to transmit radiation from the products
- C) a radiation source

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Rosenthal disclose many types of monochromators for measuring grain and food products; one with moving parts, see Fig. 7, for example, one with no moving parts using a radiation source see Fig. 9, for example.

Goetz disclose using either a filter measuring device, i.e., Fig. 1 or a diffraction grating measuring device, see Fig. 2 with a radiation source

Stearns disclose a measuring device with no moving parts using a diffraction grating, a photodetector array and a fiber optic cable with a plurality of fibers for transmitting the light from the product to the measuring device.

At the time the invention was made it would have been obvious to one of ordinary skill in the art to modify Gerrish to incorporate items A-C as seen by Rosenthal, Goetz and Stearns et al. . The rationale for this modification would have arisen for the following reason.

It would have been apparent to substitute the vague color sensors of Gerrish (see col. 15, lines 15-20, for example) with items A-C of Rosenthal, Goetz and Stearns et al since it is well known in the measuring art to use color measuring device with no moving parts to measure grain and food products with a radiation source as evidenced by Rosenthal, to use either a filter color measuring device or diffraction grating device with a radiation source as evidenced by Goetz, to

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use a measuring device with no moving parts with a diffraction grating, photodetector array and fiber optic cable with a radiation source for measuring constituents as evidenced by Stearns.

Note that the color sensors off Gerrish are on the combine.

In regard to claim 10;see col.7, lines 38+ of Stearns

Claims 7-8are rejected under 35 U.S.C. 103(a) as being unpatentable over Gerrish-Rosenthal-Goetz- Stearns(GRGS) as applied to claim 5 above in further view of Clarke.

GRGS disclose everything except the following items:

A)fiber strands forming a radiation sensor/s

At the time the invention was made it would have been obvious to one of ordinary skill in the art to modify GRGS to incorporate item A as seen by Clarke since it is well known in the art to use item A so as to direct the light from the product to the detector to form a radiation sensor, thereby achieving accurate measurement results as evidenced by Clarke;see Fig.2 for example.

Any inquiry concerning this communication should be directed to K. Hantis at telephone number (703) 308-4801. The Group fax nuber is (703)308-7722.

Hantis

July 17, 1997


K HANTIS
PRIMARY EXAMINER
GROUP 2500